

CHAPTER 2

HISTORY AND BASELINE DATA

BASIS AND STRUCTURE

Although planning strategies should not be restricted in scope by existing conditions, the District's historical record and trends establish the setting for preparing the comprehensive plan. This chapter begins with a brief historical account of the Meadowlands. It continues with an overview of land use planning in the District, beginning with the 1896 publication of the first comprehensive plan by the engineer C.C. Vermeule. The final sections establish general baseline conditions through an analysis of basic demographic information.

HISTORY

Pre-Historic Conditions

The creation of the Meadowlands and its environs resulted from the natural processes of volcanic and glacial activity approximately 17,000 years ago.

At the time of the earliest known human presence in the Mid-Atlantic region 10,500 years ago, sea level was approximately 80 feet lower than today. The Atlantic shoreline was 40 miles to the east of its present location. The Meadowlands was a broad, forested valley crossed by numerous, meandering, freshwater streams.

From about 8,000 to 3,000 years ago, a warmer climate changed the biotic community of the Meadowlands. The Meadowlands was covered by forests of American larch and black spruce. Native Americans became less nomadic and gradually established permanent settlements in the upland regions bordering the Meadowlands estuary, rather than the marshy areas. Food and clothing were obtained by hunting, fishing, and gathering. Reeds, clay, and forest provided the basic materials needed to make baskets, mats, nets, pottery, and canoes. Archeologists seem to agree that the Meadowlands was used significantly in the prehistoric period, although scant evidence has been recovered. Although Native Americans farmed and hunted, their low intensity use of the Meadowlands did not significantly alter its appearance or physical condition.

The forested valley of mixed hardwoods was inundated about 1,000 years ago when sea level rose to near present-day levels following the retreat of the last glacier in the Wisconsin age. The Meadowlands was flooded, and the Atlantic white cedar replaced the larch and spruce. The cedar swamps were the prevailing habitat type until deforestation by the Dutch and English colonists through land reclamation projects, fire, lumbering, diking, and ditching.

History and Baseline Data

Studies of dated pollen cores found in peat have established the Meadowlands as a constantly changing environment. Modern marsh grasses have been found in the area for only a few hundred years.

Additional pre-historic background establishes current environmental conditions in Chapter 5, Environmental Preservation and Enhancement.

Historic Period

The historic period, beginning with the European settlement of the area in the seventeenth century, has centered on two interrelated land use themes:

- 1) **Exploitation through resource extraction.** The appearance of Europeans resulted in attempts to alter the Meadowlands through land reclamation and fixed development.
- 2) **The development of transportation networks.** From the seventeenth century, the Meadowlands has been a significant part of the major transportation networks that brought resources from the country's interior to the international ports lining New York Harbor. Beginning with the early turnpikes and railroads which led to ferries on the Hudson River and continuing with today's interstate highways leading to international airports and through tunnels to New York City, the culture and history of the Meadowlands have been intimately tied to developments in local and regional transportation systems.

Seventeenth and Eighteenth Centuries

The early Dutch and English settlements were concentrated along the Hudson River to the east of the District, and Newark Bay and the Raritan River to the south. The first areas of European settlement in the immediate vicinity of the District were Bergen and Paulus Hook, colonized in the 1620's and 1630's and now part of Jersey City. Conflicts between the Native Americans and the European settlers resulted in the destruction of some Dutch settlements and harsh reprisals against the Native Americans. As a result of the Dutch and Indian wars, the fortified Town of Bergen was settled in 1655 and incorporated in 1668. The citizens of Bergen are believed to have controlled huge plantations that extended into the meadows, the beginnings of attempts to exploit land in the District through agriculture.

The Meadowlands was originally part of several land patents. Among these patents were the following:

- the New Barbados Patent, purchased by William Sanford in 1668, included 10,000 acres of meadow in the current towns of Kearny, Lyndhurst, North Arlington, and Rutherford;
- the Berry Patent, purchased in 1669, included the areas of East Rutherford, Carlstadt, Moonachie, and Little Ferry; and
- the Secaucus Patent, purchased in 1663 by Governor Stuyvesant.

The subdividing of these early patents in the late seventeenth and eighteenth centuries resulted in settlement taking place in the higher ground surrounding the Hackensack River basin. Early towns included Bergen (Jersey City), Hackensack, Newark and Acquackanonk (Passaic). These towns were settled primarily by Dutch from Manhattan and Long Island, except for Newark, which was settled by English from Connecticut.

The growth of these small towns resulted in the exploitation of the natural resources in the valley below, along the shores of the Hackensack River. A continued series of land grants and subdivisions extended from the earlier lots near Penhorn Creek north to Cromakill Creek along the eastern edge of the District. The Europeans constructed permanent human settlements, harvested crops, grazed livestock, and built roads and bridges. The early economic activities of fishing, hunting, farming and harvesting of salt hay, marsh grass and cedar trees slowly gave way to industrial and manufacturing uses such as milling, copper mining, clay mining for brick production, and tanning.

Boats likely provided the main form of transportation in the early years of European settlement, due to the location of settlements along the major rivers and the difficulty in crossing the meadows. Improved Indian trails provided some overland routes.



FIGURES 2.1 and 2.2 *“During the late 1600’s, throughout the 1700’s, and into the late 1800’s, small scale wet-land industries were operated in the vicinity of Secaucus. Living trees of white cedar and submerged logs were used in ship building, to construct plank roads, and for the manufacture of lumber and shingles; cattails and large marsh grasses were collected for thatch and to make chairmats and other items; and meadow cordgrass was mowed frequently to provide bedding for animals and insulation for ice that was cut during the winter.”*

— Elizabeth Righter, historian, ca. 1978

Nineteenth Century

The nineteenth century was marked by the introduction of road and rail networks across the Meadowlands, the establishment of historic settlements on high ground, the operation of mills and clay mines, and land reclamation activities. Meadowlands communities continued to grow throughout the 19th century as more jobs were created and communities around the Meadow-

History and Baseline Data

lands developed into centers of commerce. The mid 1800's saw residential development in present day Carlstadt, Little Ferry, North Arlington and municipalities surrounding the Meadowlands. Little Ferry was developed as a ferry crossing along the route from Hackensack to Bergen. The construction of the Bergen Turnpike in 1804 resulted in the eventual replacement of the ferry crossing with a bridge in 1828.

The Morris Canal opened in 1831, providing a transportation route from the Delaware River to the Passaic River. By 1836, the canal was extended to the Hudson River. In the vicinity of the Meadowlands, the canal followed the course of the Newark Turnpike across the marsh at what is now Kearny before heading south.

Much of the historic development in the Meadowlands has been a product of the turnpikes constructed in the first quarter of the 19th century. The roads, along with water transport, were a vital link in the colonization of the area by allowing farm produce, lumber, copper, brick and other locally produced products to reach the New York and European markets. The roads to Schuyler's mine and to Newark were improved during this time and became the Belleville and Newark Turnpikes, respectively. Paterson Plank Road was laid across the marsh at this time, providing a direct route from Paterson to Jersey City via Acquackanonk. Paterson Plank Road was considered a product of the "plank road fever" of the mid-nineteenth century. These roads were constructed of cedar planks about three inches thick, laid side-by-side to a width of approximately eight or nine feet. The "plank road fever" was eventually quieted by high maintenance costs and competition from more cost efficient canals and railroads. Some of these dirt and cedar plank roads have remained in their original locations, becoming the present-day's Paterson Plank Road and the Belleville, Newark-Jersey City, and Bergen turnpikes.

Population growth in Meadowlands communities, together with the technological advances of the industrial revolution, fueled the development of passenger rail service through the District. Rail service, in turn, allowed people to live farther away from their places of employment. The rail lines, originally used to transport freight, included such present day lines as the West Shore, Main, Boonton, and Morris and Essex lines. The lower land costs and proximity to New York City led to the development of several rail yards in the Meadowlands.

The nineteenth century brought considerable development to Secaucus, particularly its southern terminus, Snake Hill. The Snake Hill area covers 152 acres in Secaucus, bordering the east bank of the Hackensack River. According to some accounts, the area was named by early colonists, because the bordering marshland was infested with black water snakes, many twelve to fifteen feet long. Snake Hill may have been named after Jacob Schneck, its owner in the 1860's.

There are historic accounts of Native American occupation on or adjacent to the hill. Snake Hill was part of the Pinhorne Plantation, which was the center of the village of Secaucus from about 1680 into the nineteenth century. Penhorn Creek, at the eastern boundary of Secaucus, was named after William Pinhorne, with few aware of the original, correct spelling of the name. The site was later used as an encampment and lookout during the Revolutionary War and served as the location for various public institutions from the Civil War era to the beginning of

the 20th century: in 1863, the site of the area's first alms house; in 1870, a penitentiary; in 1873, an asylum for the insane, and in 1910 a new alms house and a school.

In the 1890's, an advertising agent passing by Snake Hill in a passenger train was inspired by the outcropping hill of rock. Soon photographs of the Rock of Gibraltar, which had a similar profile, were being used in advertisements for the Prudential Insurance Company of America. The image of the rock remains synonymous with Prudential to this day. Since the early 1900's, the area has more commonly been referred to as Laurel Hill.

Throughout the nineteenth century, efforts at land reclamation took the form of early dikes, sluiceways, and networks of drainage ditches throughout the District. Few of these cultural resources, however, have been documented according to current State or Federal standards. The earliest recorded attempt to "reclaim" the Meadowlands actually dates back to the end of the seventeenth century, when Major Nathaniel Kingsland drained part of the marshlands in the vicinity of Kearny and Harrison by means of a sluice gate. Presumably placed across the mouth of Kingsland Creek, the sluice gate produced land for grazing.

FIGURE 2.3 *"Much of the rock that was quarried from Snake Hill was used to form the embankments of the railroads that ran through the Meadowlands. These early attempts to create an artificial or altered surface, foreshadowed the massive efforts at land filling and reclamation which would become characteristic of the 20th century."*

— Grossman and Associates, Inc.
June 1992



The Swartwout Brothers attempted the first large-scale reclamation project in 1816 by draining and diking some 4,200 acres in Hudson County. The project succeeded in embanking 1,300 acres that produced vegetables, flax, and hemp. Damage from high tides and muskrat burrowing soon resulted in the flooding of the reclaimed land. The Swartwout's abandoned their attempt by the 1840's.

In 1867, Spenser Driggs and Samuel Pike devised a reclamation plan that involved building stronger, iron-cored or plated dikes to prevent damage from the tides and the muskrat population. Several miles of these dikes were constructed in the meadows, including locations along Sawmill and Kingsland creeks. Although the project was successful in diking nearly 4,000 acres, the crops grown on the land reportedly failed. Partly as a result of an agricultural depression in the 1870's, financial support was withdrawn following Pike's death in 1872.

After the failures of the various land reclamation projects, the Meadowlands remained a vast, largely vacant tract of land between the urban New York City and the developed, but more sub-

History and Baseline Data

urban areas to the north and west. Individual pockets of settlements generally centered around one particular industry located at the edge of the meadows.

Twentieth Century

Developments in transportation have had significant impacts on the District in the twentieth century. The invention of the internal combustion engine and the subsequent development of the automobile and trucking industries served as catalysts for development throughout the region at the turn of the century. Arable land that was once used for agriculture was redeveloped for new buildings and roadways and the expansion of rail yards.

The most notable road network to be constructed with impacts on the District is the New Jersey Turnpike, extending the length of the District along two corridors on either side of the Hackensack River. Several State highways also stretch across the Meadowlands, including the east-west Route 3 and the north-south Routes 1 and 9. The Pulaski Skyway (1930-32), a raised roadway which extends across the Hackensack and Passaic rivers into Jersey City, cuts through the southeast corner of the District.

The proximity of the rail yards to vast tracts of inexpensive, and developable land within the Meadowlands led to the growth of the warehouse and distribution industries. The Meadowlands experienced employment and population growth on a level unseen since the land reclamation period. By World War II, most upland areas surrounding the meadows were fully developed.

Attempts at land reclamation resumed early in the twentieth century under the Mosquito Control Commission, mandated to improve the public health and invite investment by making the Meadowlands unsuitable for mosquitoes. The Mosquito Commission's subsequent draining of 17,000 acres of meadows, mainly through the construction of ditches, fostered additional land uses and transformed the landscape of the area. Lands previously used for grazing and the harvesting of salt hay from the time of the first Dutch settlers became islands of industrial and suburban growth, transportation corridors, and extensive landfills. Development has left a cultural heritage of early to mid-twentieth century factories, houses, bridges, roadways, and dikes.

The century also witnessed extensive blasting of Snake Hill. The Hudson County Board of Freeholders awarded a contract for the demolition of 34 buildings in 1958. In 1962, a separate contract was awarded for the demolition of Snake Hill to the height of ten feet above sea level. Most of the rock blasting was completed; only a portion remains.

The Advent of Comprehensive Planning

The development of the Meadowlands occurred simultaneously with, although not in concert with, the publication of the first truly comprehensive plan for the Meadowlands by C.C. Vermeule in 1896. Vermeule, an engineering consultant to the publication "Annual Report of the State Geologist for 1896," declared in his plan that commerce and business were more reason-



FIGURE 2.4 *The land reclamation activities of the Mosquito Control Commission and other interests transformed the landscape of the Meadowlands. Source: Scientific American, July 29, 1868*

able and profitable economic uses for the Meadowlands than agriculture. His plan advanced the concept of a centralized agency to be responsible for its implementation, as well as for the private sector to construct infrastructure as demand dictated. Although Vermeule's plan was not directly implemented, its creation was the beginning of comprehensive planning for the Meadowlands region.

In spite of Vermeule's vision, the unplanned growth of the early 20th century resulted in the continued environmental degradation of the Meadowlands. Because the meadows were still popularly considered to be nothing more than vacant, unusable land, more than 2,500 acres became depositories for solid waste.

Nevertheless, the concept of comprehensive planning for the Meadowlands managed to survive. In 1926, the ideas of Vermeule were revisited when the New Jersey Highways and Waterways Improvement Association, a transportation group, requested the Legislature to authorize the Board of Commerce and Navigation to create a comprehensive plan for reclamation to address

FIGURE 2.5 *Detail from C.C. Vermeule's 1896 topographic map of the Secaucus area. Note the depiction of Paterson Plank Road; eastern tributaries to the Hackensack, including Mill Creek and Cromakill Creek; the upland areas of Secaucus; the wooded cedar swamp near the map's center; and additional marshy areas along the waterways. Vermeule's plans for new industry and commerce in the Hackensack Meadowlands set the stage for landfilling and industrial development in the 20th century.*



History and Baseline Data

various industrial, residential and recreational development issues. In the early 1930's, the State Meadows Reclamation Commission and the New York Regional Plan Association both recognized the need for a single agency to be responsible for comprehensive zoning and development of the Meadowlands. Both organizations published plans with recommendations for land uses, mechanisms by which financing could be obtained, and the creation of a political entity. The Reclamation Commission's plan was targeted at industrial uses with little concern for residential areas. The Regional Plan Association incorporated architectural, engineering and cultural elements.

The Great Depression and World War II prevented the implementation of either plan. The plans were also thwarted from becoming reality because of the unique factors that limited development in the Meadowlands: soils composition, flood control, property access, fragmented fiscal systems and land use controls, the absence of organized local sponsorship, and the lack of jurisdiction to implement regionally oriented plans. The large regional entities that created these plans had neither the time nor the advantage of local knowledge to focus on the small area that constituted the Meadowlands.

During the 1950's and 1960's, local business owners and State and local authorities started to organize in new ways. Industrial development and an expanding work force caused the municipalities surrounding the Meadowlands to grow quickly. The area served as a gateway to the

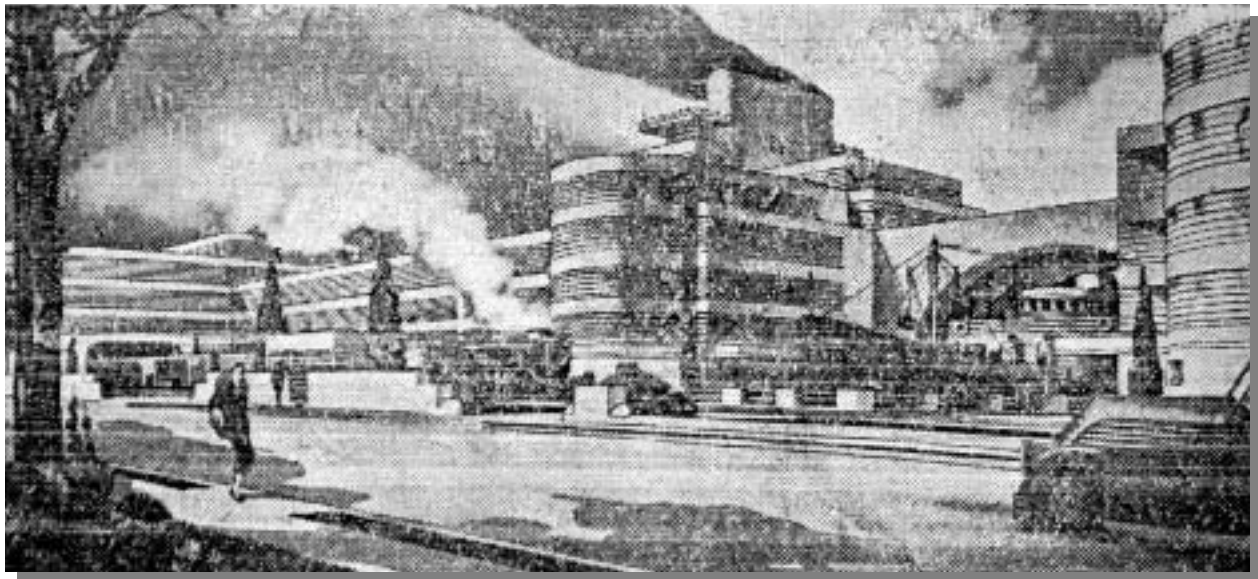


FIGURE 2.6 *An article from an unidentified December 1930 publication described the New York Regional Plan Association's proposals for the area known as the Hackensack Meadows. This concept drawing appeared with the following caption: "Railroads, ships, and highways, converging on the reclaimed areas devoted to manufacturing, would help to make this the ideal industrial city envisioned by the Regional Plan of New York." Along with these industrial cities, the Regional Plan called for "a unified system of highways, railroad trunk lines, rapid transit lines and waterways" and "a balanced apportionment of land uses," including "a park half again as large as Central Park."*

Hudson River waterfront and Manhattan. It was soon crisscrossed by new rail lines and became home to many rail yards. As the railroads continued to expand, the trucking and automobile industries unfolded. These industries created development pressures for more roads and warehouse and distribution facilities in the district. Consequently, rail and road development played a fundamental role in the evolution of the Meadowlands.

In 1955, the Meadowlands Regional Planning Board (MRPB) was established as the first regional planning board in New Jersey, pursuant to the New Jersey County and Regional Planning Act. The statute creating the Board was adopted by five Meadowlands communities: Carlstadt, East Rutherford, Rutherford, Lyndhurst, and North Arlington. The MRPB's focus was the transportation and land use needs of its five member municipalities.

In 1960, the MRPB was replaced by the Meadowlands Regional Development Agency (MRDA). The MRDA was proposed by the New Jersey Department of Conservation and Economic Development. It included a total of ten municipalities: the five member municipalities of the former MRPB, as well as Kearny, Moonachie, North Bergen, Secaucus and Teterboro.

The Hackensack Meadowlands Development and Reclamation Act, passed by the New Jersey Legislature in 1968 and enacted in 1969, created the Hackensack Meadowlands Development Commission. The Act added the four municipalities of Little Ferry, Ridgefield, South Hackensack, and Jersey City to the ten municipalities of the MRPB. The Commission was renamed the New Jersey Meadowlands Commission (NJMC) on August 27, 2001. The change better reflects the broad mission to protect and enhance the Meadowlands, while ensuring that development be both orderly and environmentally compatible. The inclusion of the word "development" in the former HMDC name created the misconception that the Commission facilitated development at the expense of the environment. The next section describes the NJMC's legal authorization and mission.

LEGAL AUTHORITY

The multi-jurisdictional Meadowlands finally came under the autonomous control of a State agency with the enactment of the Hackensack Meadowlands Reclamation and Development Act (N.J.S.A. 13:17-1 et seq.) in 1969. The Act created the Hackensack Meadowlands Development Commission, now known as the NJMC, to fulfill its mandates. The Act recognized the area as an "incalculable resource" that would provide jobs and housing to the Meadowlands communities. The intent was to overcome three main obstacles to development: governmental fragmentation, local planning and land use controls, and competition for ratables. The NJMC's jurisdiction was defined to encompass approximately 19,485 acres in portions of fourteen municipalities. Figure 2.7 on the following page shows the total acreage of each municipality and the portion within the Meadowlands District.

History and Baseline Data

FIGURE 2.7			
Land in District Compared to Total			
Municipalities of the Meadowlands District			
MUNICIPALITY	TOTAL ACRES	—IN DISTRICT— ACRES	PERCENT
<u>Bergen County:</u>			
Carlstadt	2,784	2,315	83.2%
East Rutherford	2,596	1,938	74.7%
Little Ferry	1,033	428	41.4%
Lyndhurst	3,214	1,901	59.1%
Moonachie	1,034	827	80.0%
North Arlington	1,576	488	31.0%
Ridgefield	1,823	983	53.9%
Rutherford	1,858	567	30.5%
South Hackensack	508	86	16.9%
Teterboro	734	492	67.0%
<u>Hudson County:</u>			
Jersey City	13,592	959	7.1%
Kearny	6,499	3,419	52.6%
North Bergen	3,581	1,330	37.1%
Secaucus	4,196	3,752	89.4%
Meadowlands District Total		19,485 acres	
Sources: NJDEP GIS Digital Data, October 1996 NJMC Geographic Information Systems Parcel Map, June 2002			

The Commission is in, but not of, the New Jersey Department of Community Affairs (NJDCA). It consists of seven members:

- The Commissioner of the NJDCA, ex officio, or his/her alternate, traditionally serving as chairman; and
- Six citizens from Bergen and Hudson counties appointed by the Governor with the advice and consent of the State Senate.

The Executive Director of the NJMC, appointed by the Commission, is responsible for day to day operations and the implementation of Commission policies. He/she also serves as Secretary to the Commission.

The responsibilities and powers of the Commission (N.J.S.A. 13:17-6 *et seq.*) include the following:

1. To develop, adopt, and promulgate a master plan for the physical development of the lands within the District;
2. To adopt codes and standards to carry out the master plan;
3. To issue negotiable bonds and notes for any corporate purpose;
4. To exercise the power of condemnation to acquire land;
5. To enter into cooperative agreements with other governmental agencies for the reclamation of the Meadowlands, to determine the existence of renewal areas, and to undertake redevelopment projects;
6. To function as a local planning agency by undertaking projects necessary to reclaim, develop, redevelop and improve land within the District;
7. To establish engineering standards for reclamation and construction;
8. To form improvement districts within the District in order to levy special assessments against real estate in proportion to the benefits conferred by public improvements;
9. To review and regulate all subdivisions within the District;
10. To operate an inter-municipal tax sharing account in order that the financial benefits of the District are clearly and equitably distributed among all the constituent municipalities;
11. To provide solid waste facilities; and
12. To exercise all authorized powers of the Commission deemed for a public purpose, including the acquisition of any property for public use deemed superior to the public use of any municipality, county, school district, or the local corporate body with corporate succession.

The NJMC's permitting function is a valuable tool to assist with carrying out its responsibilities. The Commission conducts site plan and subdivision reviews to evaluate consistency with its regulations. A zoning certificate must be obtained prior to the improvement or filling of a site and/or the construction of or addition to any structure. Additionally, the NJMC issues occupancy certification prior to any change of tenancy in the District to certify the proposed use or occupancy complies with the applicable regulations. In cases where proposed development or occupancy does not comply with NJMC regulations, variance approvals must be sought. Prior to the start of any new construction or alterations to existing structures, the NJMC conducts a construction plan review in accordance with the State building code. The municipalities are, however, responsible for issuing construction permits upon approval by the Commission.

Other valuable tools are the NJMC's powers of acquisition, generally used to obtain land for preservation and/or redevelopment, and redevelopment, discussed in Chapter 3, Land Use.

In recognition of the need to maintain public input and interaction with local governments, the Hackensack Meadowlands Reclamation and Development Act also created the Hackensack Meadowlands Municipal Committee (HMMC). The HMMC consists of the chief executive of each constituent municipality or his/her alternate. The Committee is charged with reviewing all proposed codes and standards, master plans or amendments, development and redevelopment or improvement plans or other major decisions of the NJMC. It has the authority to veto proposed master plans, amendments, and redevelopment plans. The NJMC has the right to override any such veto with a 5/7 vote.

History and Baseline Data

EXISTING CONDITIONS AND TRENDS

The background information in this section contributes to a baseline from which planning strategies can be devised to guide the future of the Meadowlands District. Established land use patterns and the demographic fundamentals of population, housing, and employment are key components of the baseline condition. Changes in these demographic areas create pressures for changes in land use and contribute towards the development of a framework for the future. Where data specific to the District is not available, it is presented at the municipal, county, or regional level.

Population Characteristics

The Census 2000 reports that there were approximately 448,585 residents in the fourteen constituent municipalities of the District, an increase of 8.3 percent from the 1990 level of 414,070. The increase can be attributed to increased immigration, the revitalization of urban areas, and sustained economic expansion in the region. It reverses a period of decline from 1970 to 1990, in which District municipalities lost a total of 10.3 percent of the resident population. From 1990 to 2000, District municipalities in Bergen County largely regained the population lost in the prior two decades, while those in Hudson County realized a slight gain from the 1970 level. Total population levels for the District municipalities in 2000 were restored to 97 percent of the 1970 level. The municipalities' population residing within the District has increased 23.6 percent from 1980 to 2000, although the population level has stabilized in recent years. The in-District portion of the District municipalities' total population stood at 2.4 percent in 2000. Population data are shown in Figure 2.8.

FIGURE 2.8				
Resident Population of Meadowlands District Municipalities				
	Total 2000	In- District 1980	In- District 1990	In- District 2000
Bergen Municipalities	93,994	2,687	2,736	2,609
Hudson Municipalities	354,591	5,920	7,690	8,026
Total District Municipalities	448,585	8,607	10,426	10,635
<i>Sources: US Census 2000 as compiled by the New Jersey Department of Labor, Division of Labor Market & Demographic Research; Borough of Teterboro; US Census 1970, 1980 and 1990 as compiled by the Hackensack Meadowlands Data Book, 1996</i>				

The District's municipalities also experienced a decrease in the average household size from 1970 to 2000. The US Census Bureau defines a household as a person or group of people who occupy a housing unit. The District's municipalities had an average household size of 2.68 in 2000, identical to the State's average and significantly lower than the 2.97 persons per household in 1970. Figure 2.9 shows the overall shift in household size for the District's municipalities from 1970 to 2000. These shifts are attributed to reduced birth rates and an aging population.

FIGURE 2.9				
Average Household Size in District Municipalities				
	1970	1980	1990	2000
Bergen Municipalities	2.97	2.66	2.54	2.50
Hudson Municipalities	2.96	2.73	2.73	2.74
Total District Municipalities	2.97	2.71	2.69	2.68
Sources: US Census 2000 as compiled by the New Jersey Department of Labor, Division of Labor Market & Demographic Research; Borough of Teterboro; US Census 1970, 1980 and 1990 as compiled by the Hackensack Meadowlands Data Book, 1996				

The number of households in District municipalities, including areas outside the District, appears in Figure 2.10. The total increased 7.4 percent from 1970 to 2000. The number had decreased slightly from 1970 to 1990, but recovered with an increase of 8.6 percent from 1990 to 2000.

FIGURE 2.10				
Number of Households in Meadowlands District Municipalities				
	1970	1980	1990	2000
Bergen Municipalities	34,510	35,595	34,773	37,620
Hudson Municipalities	121,187	117,394	119,213	129,621
Total District Municipalities	155,697	152,989	153,986	167,241
Sources: US Census 2000 as compiled by the New Jersey Department of Labor, Division of Labor Market & Demographic Research; Borough of Teterboro; US Census 1970, 1980 and 1990 as compiled by the Hackensack Meadowlands Data Book, 1996				

A data snapshot of households and families in the District's municipalities appears as Figure 2.11 on the following page. A profound transformation in household size and composition began in the 1970's and is still taking place. These are the main observations:

- As of 2000, just under two-thirds of the households in the District's fourteen municipalities consisted of families. The US Bureau of the Census defines a family as a group of two or more people residing together and related by birth, marriage, or adoption.
- The remaining nonfamily households consist of a householder living alone or sharing the home exclusively with people to whom he or she is not related.
- Married couple families compose about 43 percent of households in District municipalities.
- Female-headed households account for about one in six households.
- Three in ten households include children under the age of 18.
- Approximately 28 percent of householders live alone.
- About one in ten households consists of a householder age 65 or more living alone.

History and Baseline Data

The overall trends for the past three decades are fewer married couples and families with children and more female-headed households, persons living alone, and elderly households.

FIGURE 2.11				
Households and Families, Year 2000				
	District Municipalities			New Jersey
	All District	Bergen	Hudson	
Total households	167,226	37,605	129,621	3,064,645
Percent of total households:				
Family households	64.9%	66.0%	64.5%	70.3%
Married couple family	43.3%	52.4%	40.6%	53.5%
Female householder, no husband present	16.3%	10.6%	18.0%	12.6%
With own children under 18 years	30.4%	27.1%	31.4%	33.5%
Nonfamily households	35.1%	34.0%	35.5%	29.7%
Householder living alone	28.4%	28.9%	28.3%	24.5%
Householder living alone age 65 years and over	9.5%	11.5%	9.0%	9.8%
<i>Source: Census 2000 Supplementary Survey</i>				

Income information regarding New Jersey households is available from the Census 2000 Supplementary Survey. The Supplementary Survey collected demographic, social, economic, and housing data from a sample of 700,000 households nationwide. The Census 2000 Supplementary Survey reported that the State ranks first in terms of median household income, at an estimated \$54,226 a year. Selected income characteristics for Bergen and Hudson County households are compared to those for New Jersey as a whole in Figure 2.12.

FIGURE 2.12			
Household Income Profile, Year 2000			
	Bergen County	Hudson County	New Jersey
Median household income	\$61,925	\$37,189	\$54,226
Per capita income	\$33,725	\$20,093	\$27,311
<i>Source: Census 2000 Supplementary Survey</i>			

Housing

The Census 2000 reports that the District's municipalities contain a total of 174,498 housing units, of which 4,649 are located within the District. From 1980 to 2000, the number of in-

District units increased 21.3 percent. Secaucus experienced a near-doubling of its housing inventory during that time. The creation of new housing slowed during the 1990's as most suitable, available land became developed. Low vacancy rates in the year 2000 are indicative of a housing shortage in the region. Data appear in Figure 2.13.

FIGURE 2.13						
Housing Units in District Municipalities						
	-----Housing Units-----					
	Total 2000	In- District 1980	In- District 1990	In- District 2000	Vacant 2000	% Vacant 2000
Bergen Municipalities	38,584	999	1,136	1,050	43	4.1%
Hudson Municipalities	135,914	2,833	3,746	3,599	114	3.2%
Total District Municipalities	174,498	3,832	4,882	4,649	157	3.4%
<i>Sources: US Census 2000 as compiled by the New Jersey Department of Labor, Division of Labor Market & Demographic Research; Borough of Teterboro; US Census 1970, 1980 & 1990 as compiled by the Hackensack Meadowlands Data Book, 1996</i>						
<i>Note: The total number of in-District units in 1990 is indicated as greater than the number in 2000 for both Bergen and Hudson counties. The 1990 numbers were derived from estimating techniques and were apparently overstated. It was necessary to estimate the number of housing units in 1990, due to the Census block groups and the Meadowlands District not having coterminous boundaries at that time. Boundaries are shared as of the Census 2000.</i>						

Employment

The region encompassing Bergen and Hudson counties offers an educated, competitive labor force. Figure 2.14 shows the percentages of county residents that have attained various educational levels, with several favorable comparisons to the State and the Nation. For instance, Bergen and Hudson counties have higher percentages of residents that have attained a bachelor's degree or higher than the United States.

FIGURE 2.14			
Educational Attainment			
<i>Percent of Residents at Specific Level or Higher</i>			
Jurisdiction	High school graduate or higher	Bachelor's degree or higher	Graduate/ professional degree
Bergen County	87.3%	39.9%	14.1%
Hudson County	75.6%	27.2%	9.0%
State of New Jersey	83.5%	31.1%	11.3%
United States	81.6%	25.1%	9.0%
<i>Source: US Bureau of the Census, Census 2000 Supplementary Survey</i>			

History and Baseline Data

Data sorted by the North American Industry Classification System (NAICS) code are available to show employment within the District. The NAICS is a classification system developed by the United States, Canada, and Mexico to provide comparable industrial production statistics in the three countries. Year 2001 data within the District are included as Figure 2.15. In 2001, employment within the District stood at a total of 80,057 jobs. Manufacturing and wholesale trade are the dominant employment types. Transportation and warehousing, as well as retail trade, also employ significant numbers.

The total employment for 2001 compares to 72,308 jobs in 1991, reported under the Standard Industrial Classification (SIC) code. The SIC system, used to ensure that data about the US economy published by governmental agencies are uniform, has largely been replaced by the NAICS.

FIGURE 2.15
Employees within the Meadowlands District by NAICS Code

<u>NAICS Code and Description:</u>	<u>Number of Employees</u>		
	<u>Bergen Portion</u>	<u>Hudson Portion</u>	<u>District Total</u>
Agriculture, Forestry, Fishing & Hunting	15	0	15
Mining	0	4	4
Utilities	32	198	230
Construction	1,239	1,062	2,301
Manufacturing	16,083	5,736	21,819
Wholesale Trade	5,876	8,091	13,967
Retail Trade	1,213	5,642	6,855
Transportation and Warehousing	2,621	6,971	9,592
Information	1,130	2,707	3,837
Finance and Insurance	1,237	1,489	2,726
Real Estate, Rental & Leasing	561	633	1,194
Professional, Scientific, & Technical Services	2,047	2,190	4,237
Management of Companies and Enterprises	2	40	42
Administrative Support/ Waste Mgmt/Remediation Serv	1,751	1,043	2,794
Educational Services	386	130	516
Health Care & Social Assistance	2,943	509	3,452
Arts, Entertainment & Recreation	1,634	173	1,807
Accommodation & Food Services	1,673	1,415	3,088
Other Services (except public administration)	578	440	1,018
Public Administration	167	396	563
TOTAL EMPLOYEES	41,188	38,869	80,057

Source: Dun and Bradstreet, December 2001

Note: Information was obtained from impartial third-party sources and may not be all-inclusive.

KEY CONDITIONS

Several key conditions and trends emerge from the data presented in this chapter:

- The District's municipalities, as well as Bergen and Hudson counties, are home to a relatively stable, educated population.
- The high median income for householders in Bergen and Hudson counties indicates strong consumer buying potential to support the regional economy.
- Housing is in high demand, with just 3.4 percent of all residential units vacant in 2000.
- Employment is available in a wide range of industries, evidence of a well-diversified economy.

These and other trends are explored more fully in the following chapters, which encompass the various functional areas that make the District work. An understanding of the District's land use patterns serves as the starting point.

History and Baseline Data

SOURCES

Dun and Bradstreet, December 2001.

Facciolla, Nicholas; "History of Snake Hill," Meadowlands/USA, Meadowlands Chamber of Commerce, 1980.

Grossman and Associates, Inc.; Stage 1A Archeological and Historical Sensitivity Evaluation of the Hackensack Meadowlands, New Jersey; EPA Contract No. D102182QZ; 15 June 1992.

Grossman and Associates, Inc.; Hackensack Meadowlands Archeological and Historical Sensitivity and Impact Evaluation; Volumes I and II; 15 August 1994.

Hackensack Meadowlands Development Commission, Hackensack Meadowlands Comprehensive Land Use Plan, October 1970.

Hackensack Meadowlands Development Commission, Hackensack Meadowlands Data Book, 1996.

Hackensack Meadowlands Reclamation and Development Act, N.J.S.A. 13:17-1 et seq.

New Jersey State Data Center, New Jersey Department of Labor, <<http://www.wnjp.in.net/OneStopCareerCenter/LaborMarketInformation/njsdc/>>, March through August 2002.

US Bureau of the Census, US Census of Population and Housing, 1970-2000.

US Bureau of the Census, Census 2000 Supplementary Survey.

All photos and other visual images, unless otherwise noted, are the property of the New Jersey Meadowlands Commission.